

Transportation

# **Intelligent Transportation Systems**

**Standards Fact Sheet** 

**SAE J2353** 

**Advanced Traveler Information Systems (ATIS) Data July 2001** 

**Dictionary** 

## Overview

Data dictionaries are essential components in the design and operation of modern, computer-based systems. They provide the basic information definitions, generally described as data elements (DEs), necessary for the exchange of information between systems.

Data dictionaries work in conjunction with at least two other sets of standards to provide effective data exchange. The first of these other sets of standards are message sets that handle information exchanges on specific topics. In a simple analogy, message sets are the sentences, while DEs are the words. The second set of standards needed for data exchange provides the actual communications protocols, and describes how the messages are encoded for transmission, transmitted and then decoded by the receiver.

To obtain a copy of this standard, please contact:

# Society of Automotive Engineers (SAE)

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This standard, SAE J2353, Advanced Traveler Information Systems (ATIS) Data Dictionary, defines the data elements for advanced traveler information system (ATIS) messages. In addition, it may be used by other ITS systems that convey information about ATIS-related items. This standard is the repository of unambiguous definitions needed to convey information to travelers and is one of a group of basic standards that are often referred to as functional area data dictionaries.

#### What is this standard for?

This standard provides the concise definition of data elements, including instructions on how to encode them at the bit level. It also describes the implied meaning of various phrases and points to other related data concepts on an element-by-element basis.

# Who uses it?

This standard is intended for use by technical implementers who work with the structural format that is used to convey ATISrelated information. The information provided in this standard can be converted into software structural representation in a wide variety of implementation languages. The specification itself is composed in Abstract Syntax Notation One (ASN.1), as are most message-related standards used in ITS.

### How is it used?

This standard is used by implementers to understand and create messages fitting various ATIS and ITS formats. For example, it could be used to establish a set of messages for suppliers of traveler- and traffic-related information. It also provides a definitive list of ATIS data elements.

### Scope

This standard defines ATIS data elements and is the reference companion for SAE J2354. SAE J2354 provides the primary set of messages that build upon the DEs defined in this standard.

## **Related documents**

SAE J2354 - Advanced Traveler Information Systems (ATIS) Message Sets

SAE J2369 - Standards for ATIS Message Sets Delivered over Reduced Bandwidth Media

SAE J2313 - On Board Land Vehicle Mayday Reporting Interface Standard

ITU-TX.680 – Data Networks and Open System Communications, OSI Networking and System Aspects - Abstract Syntax Notation One (ASN.1) Specification of Basic Notation